ii. Analysis. To anticipate a claimed invention, a single reference must anticipate all of the essential elements of the invention.[1] In the present rejection the examiner not properly identified where Grossman teaches a "target-specific portion" within the meaning of the present application. .

Referring to Fig. 1A in Grossman, the examiner states that "The portion of (26) which is not hybridized to the tag complement is the target specific portion... .." (Paragraph 3.) Applicant disagrees. In the present specification, the target specific portion is defined as follows:

> "The target-specific portion **10** of the probe may be any entity capable of sequence-specific binding to a target nucleic acid sequence."

(Page 9 lines 9-10.) However, element 26 in Grossman is defined as the target nucleic acid sequence itself. (Column 7 lines 29-30.) Thus, element 26 in Grossman ***is the target nucleic acid sequence***, while target specific portion 10 in the present application is ***complementary to the target nucleic acid sequence***. Therefore, at Fig. 1A, Grossman does not disclose a binary composition comprising a target specific portion and a tag. Rather, Grossman teaches a unitary composition comprising a target specific portion and a mobility modifier, where the unitary composition is illustrated as being bound to a target nucleic acid.

Therefore, because, as set forth above, Grossman fails to teach all of the essential elements of claims 1, 2, 3, 5, 8, 9, 10, 11 and 12 of the present application, these claims must be considered novel over Grossman.

B. REJECTION BASED ON COLLINS.

At paragraph 4 of the Office Action, the examiner has rejected claims 1-12 of the present application under 35 U.S.C. §102(b) as being anticipated by Collins et al., U.S. Patent No. 6,232,462 ("Collins"). The rejection is respectfully traversed in light of the foregoing amendments and the following remarks.

i. The Rejection. The present rejection is based on the examiner's contention that each of the elements of the claimed invention are disclosed in Fig. 3 (center section) of Collins. More specifically, at page 3 of the Office Action, the examiner states that,

> "The polynucleotide marked with an LP at the end is the tag complement. The portion marked (LP) is the tail... . The portion marked that the LP probe is bound to is the tag... . The target specific portion of the probe in shown in this case bound to the portion of the complex marked CE... ."

(Office Action, page 4.)

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[1] *Hybritech Inc. v. Monoclonal Antibodies, Inc.* , 231 USPQ 81, 802 F.2d 1367 (Fed.Cir. 1986).

ii. Analysis. At Fig. 3, Collins does not teach a mixture of probe/mobility modifier complexes wherein a mobility of a first probe/mobility modifier complex in a mobility-dependent analysis technique is distinguishable from a mobility of a second probe/mobility modifier complex in the mobility-dependent analysis technique. Rather, at Fig. 3, Collins teaches four nucleic acids attached to a solid (presumably immobile) support.

Therefore, because, as set forth above, Collins fails to teach all of the essential elements of claims 1-12 of the present application, these claims must be considered novel over Collins.

Double-Patenting Rejection

At paragraph 6 of the Office Action, the examiner has provisionally rejected claims 1-12 of the present application under the judicially-created doctrine of non-statutory double patenting. Applicant respectfully requests that he be permitted to address the non-statutory double patenting rejection at a point in the prosecution at which the rejection is the only rejection remaining in the present application.

III. CONCLUSION

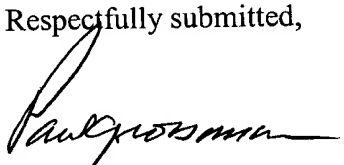
In view of the foregoing amendments and remarks, the applicant submits that the claims now pending in the present application are in condition for allowance. A Notice Of Allowance is therefore respectfully requested.

If in the opinion of the examiner, a telephone conference would expedite the prosecution of the subject application, the examiner is invited to call the undersigned at 650-638-5846.

IV. CONDITIONAL PETITION FOR TIME EXTENSION and FEE AUTHORIZATION

If any additional time extensions are required, such time extensions are hereby requested. If any additional fees not submitted with this response are required, please take such fees from deposit account number **01-2213**.

Respectfully submitted,



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APPENDIX A

Marked-Up Version Of Amended Claims

1. (Once Amended) A [binary] composition for detecting **[one]** two or more target nucleic acid sequences comprising:

a first complex comprising:

a first probe comprising a first target-specific portion for sequence-specific hybridization to a first target nucleic acid sequence, and a first tag; [and]

a first mobility-modifier comprising a first tail and a first tag complement for binding to the first tag; and

a second complex comprising:

a second probe comprising a second target-specific portion for sequence-specific hybridization to a second target nucleic acid sequence, and a second tag; and

a second mobility-modifier comprising a second tail and a second tag complement for binding to the second tag;

wherein a mobility of the first complex in a mobility-dependent analysis technique is distinguishable from a mobility of the second complex in the mobility-dependent analysis technique; and

wherein the first complex and the second complex are present as a mixture.

2. (Once Amended) The composition of **claim 1** wherein the first target-specific portion comprises polynucleotide.

3. (Once Amended) The composition of **claim 2** wherein the first target-specific portion comprises a 3'-hydroxyl group.

4. (Once Amended) The composition of **claim 2** wherein the first target-specific portion comprises PNA.

5. (Once Amended) The composition of **claim 1** wherein the first tag portion comprises polynucleotide.

6. (Once Amended) The composition of **claim 5** wherein the first tag portion [is] comprises PNA.

7. (Once Amended) The composition of **claim 1** wherein the first tag complement portion [is] comprises PNA.

8. (Once Amended) The composition of **claim 1** wherein both the first tag and first tag complement are polynucleotide, and one of the first tag complement and first tag comprises a sequence selected from the group consisting of $(CAG)_n$ and $(TCC)_n$ wherein n is 1 to 10.

9. (Once Amended) The composition of **claim 1** wherein the first mobility modifier comprises a tail portion that is at least partially not polynucleotide.

10. (Once Amended) The composition of **claim [8] 1** wherein the first tail is a polymer.

11. (Once Amended) The composition of **claim [9] 10** wherein the polymer is selected from the group consisting of polyethyleneoxide and polypeptide.

APPENDIX B

Clean Version Of All Pending Claims

1. (Once Amended) A composition for detecting two or more target nucleic acid sequences comprising:

a first complex comprising:

a first probe comprising a first target-specific portion for sequence-specific hybridization to a first target nucleic acid sequence, and a first tag;

a first mobility-modifier comprising a first tail and a first tag complement for binding to the first tag; and

a second complex comprising:

a second probe comprising a second target-specific portion for sequence-specific hybridization to a second target nucleic acid sequence, and a second tag; and

a second mobility-modifier comprising a second tail and a second tag complement for binding to the second tag;

wherein a mobility of the first complex in a mobility-dependent analysis technique is distinguishable from a mobility of the second complex in the mobility-dependent analysis technique; and

wherein the first complex and the second complex are present as a mixture.

2. (Once Amended) The composition of **claim 1** wherein the first target-specific portion comprises polynucleotide.

3. (Once Amended) The composition of **claim 2** wherein the first target-specific portion comprises a 3'-hydroxyl group.

4. (Once Amended) The composition of **claim 2** wherein the first target-specific portion comprises PNA.

5. (Once Amended) The composition of **claim 1** wherein the first tag portion comprises polynucleotide.

6. (Once Amended) The composition of **claim 5** wherein the first tag portion comprises PNA.

7. (Once Amended) The composition of **claim 1** wherein the first tag complement portion comprises PNA.

8. (Once Amended) The composition of **claim 1** wherein both the first tag and first tag complement are polynucleotide, and one of the first tag complement and first tag comprises a sequence selected from the group consisting of $(CAG)_n$ and $(TCC)_n$ wherein n is 1 to 10.

9. (Once Amended) The composition of **claim 1** wherein the first mobility modifier comprises a tail portion that is at least partially not polynucleotide.

10. (Once Amended) The composition of **claim 1** wherein the first tail is a polymer.

11. (Once Amended) The composition of **claim 10** wherein the polymer is selected from the group consisting of polyethyleneoxide and polypeptide.

12. The composition of **claim 1** further comprising a hybridization enhancer.